

FIG. 6A

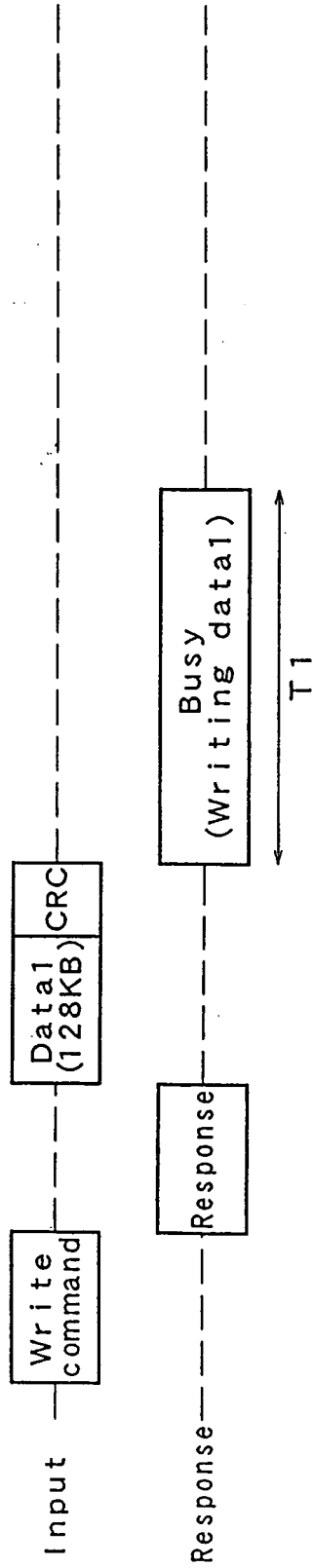


FIG. 6B

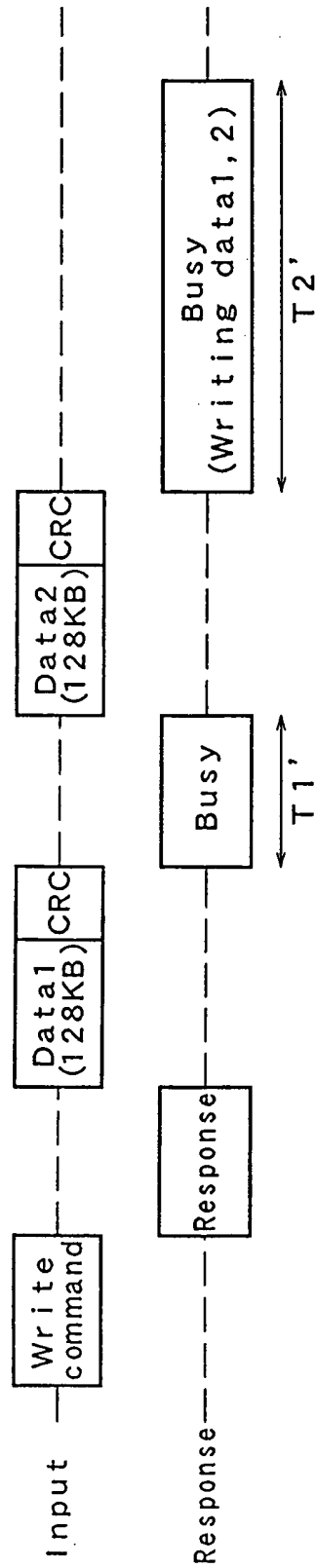


FIG. 11A

| Items | Condition values |
|-----------------------|--|
| Process unit size | Multiple length of 128 KB |
| Process unit boundary | Multiple length of 128 KB |
| Access method | Sequentially accessing to sequential area having 256 KB over |
| Input clock frequency | 25 MHz over |
| Bit width | 4 bits |

FIG. 11B

| |
|--|
| Transfer rate of reading(standard) = 11 MB/s |
| Transfer rate of writing(standard) = 10 MB/s |
| Transfer rate of erasing(standard) = 10.3 MB/s |
| Transfer rate of reading(worst) = 6 MB/s |
| Transfer rate of writing(worst) = 5 MB/s |
| Transfer rate of erasing(worst) = 5.1 MB/s |

FIG. 12

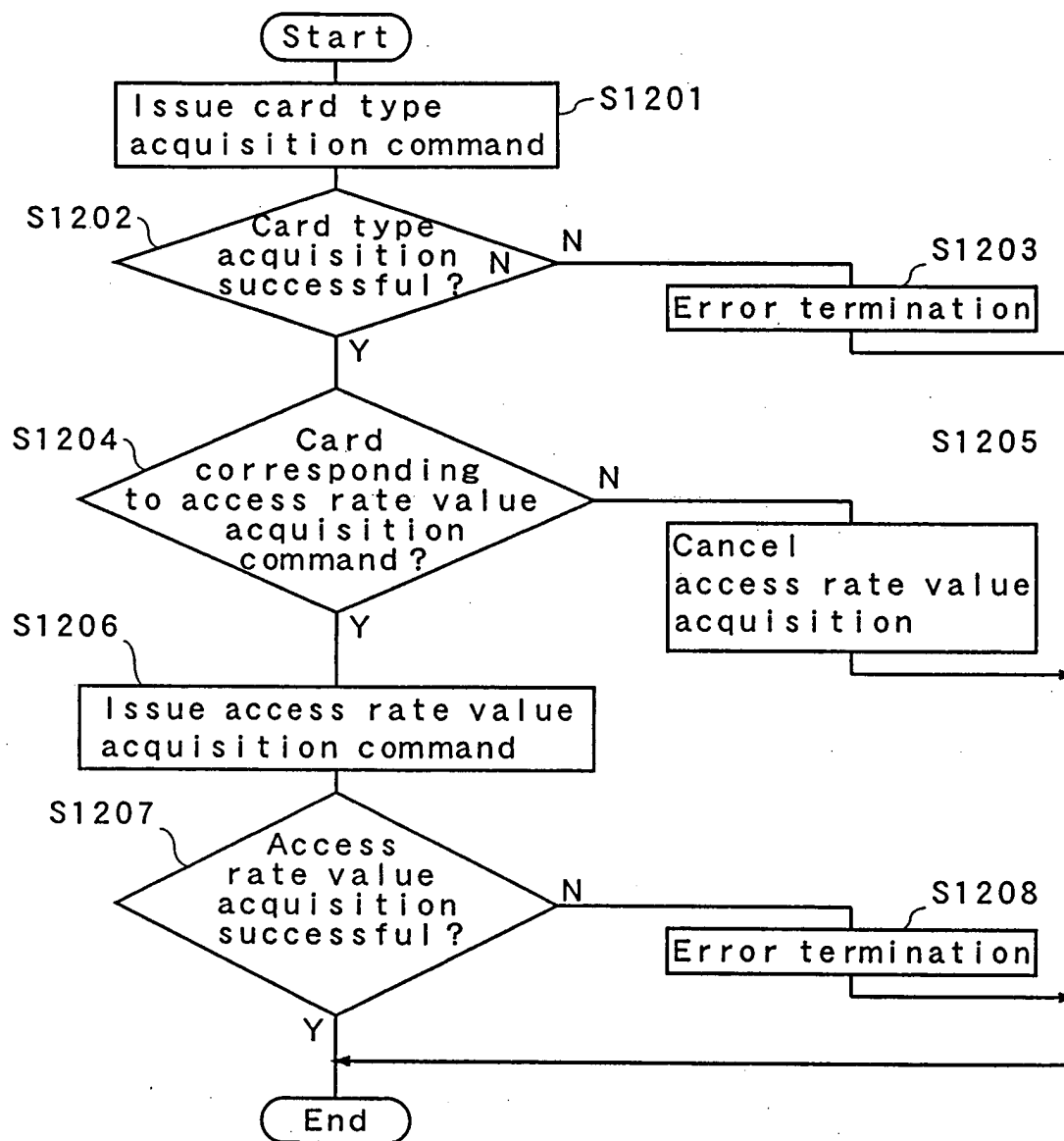


FIG. 13

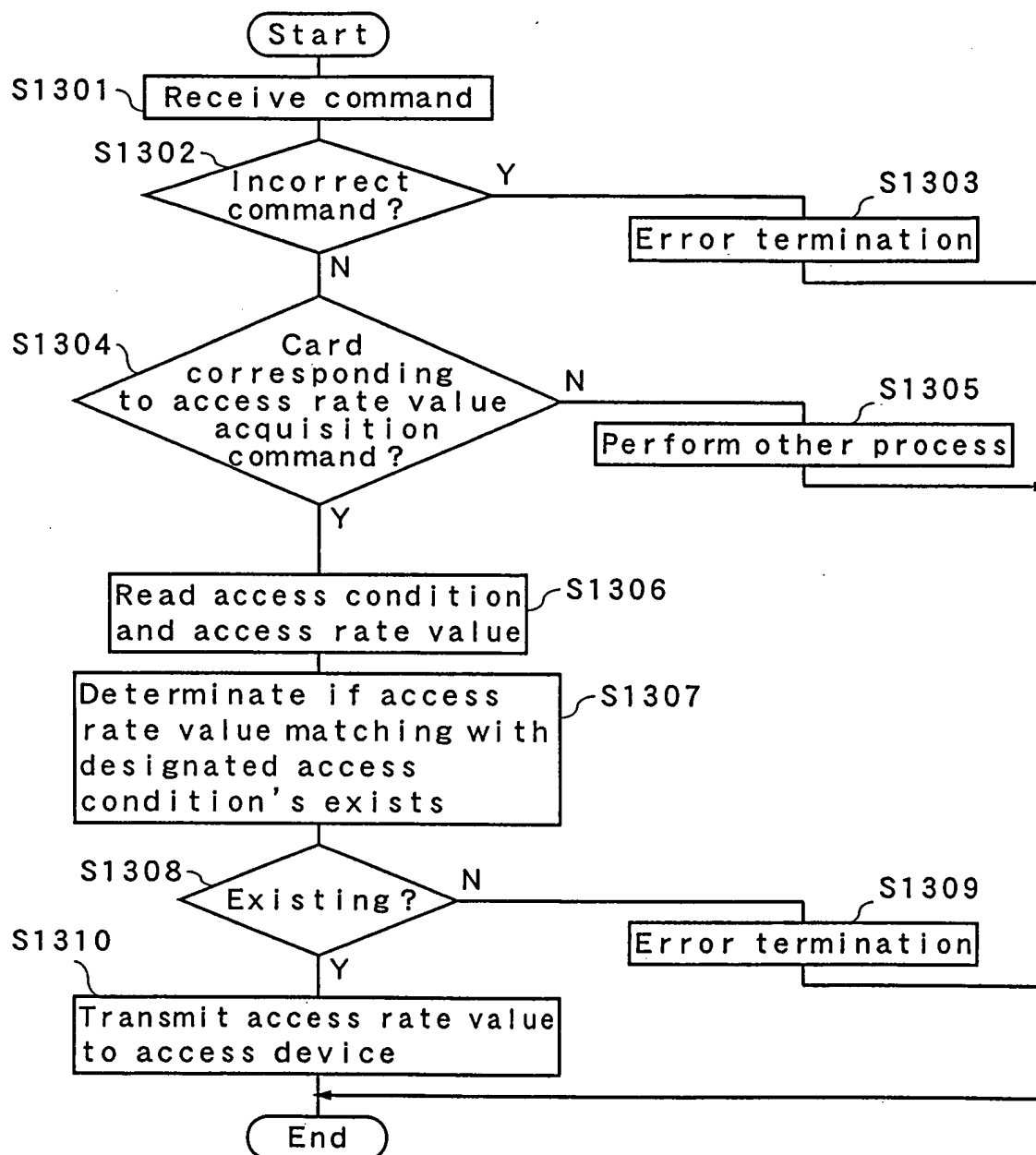


FIG. 15

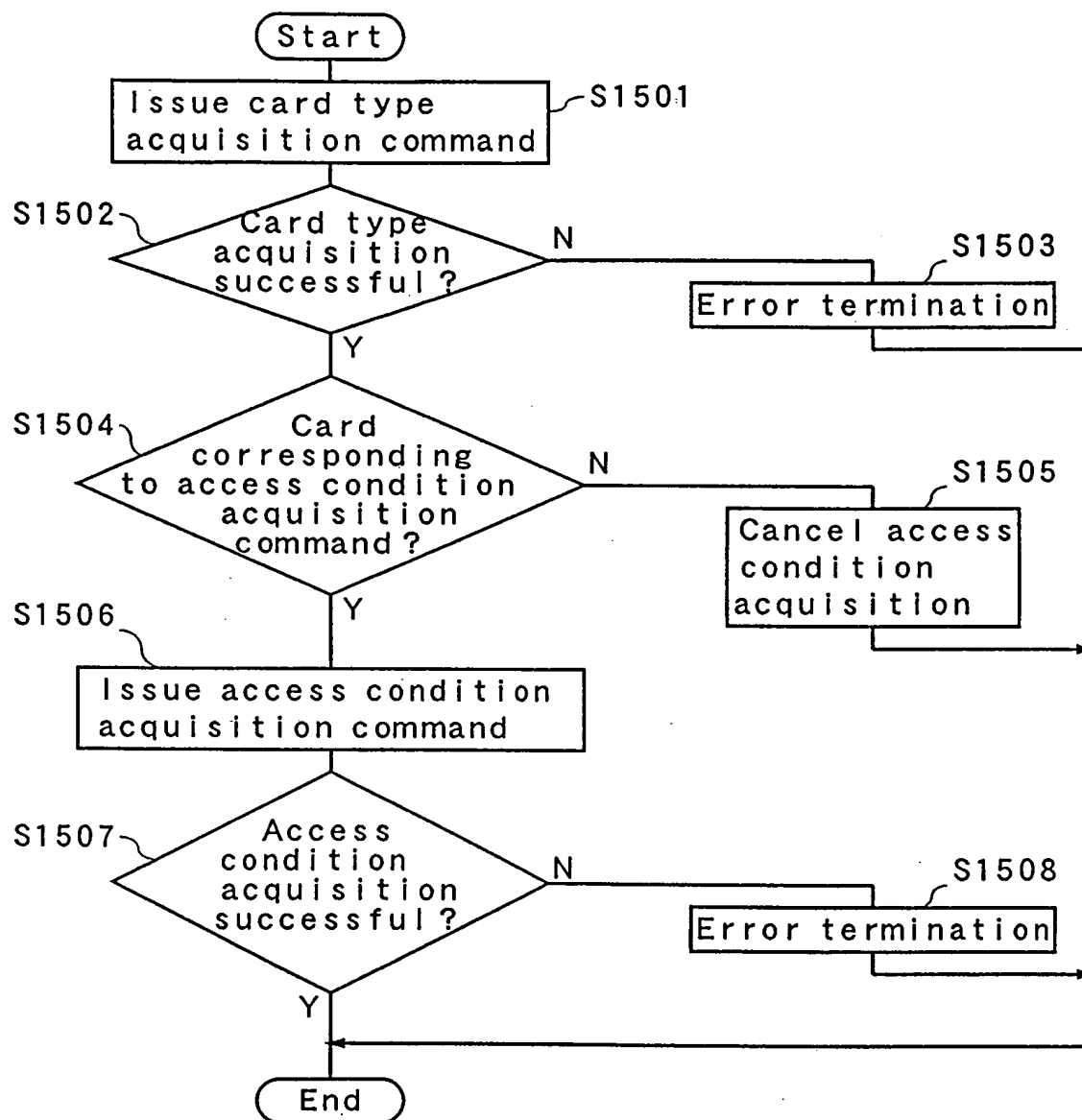


FIG. 16

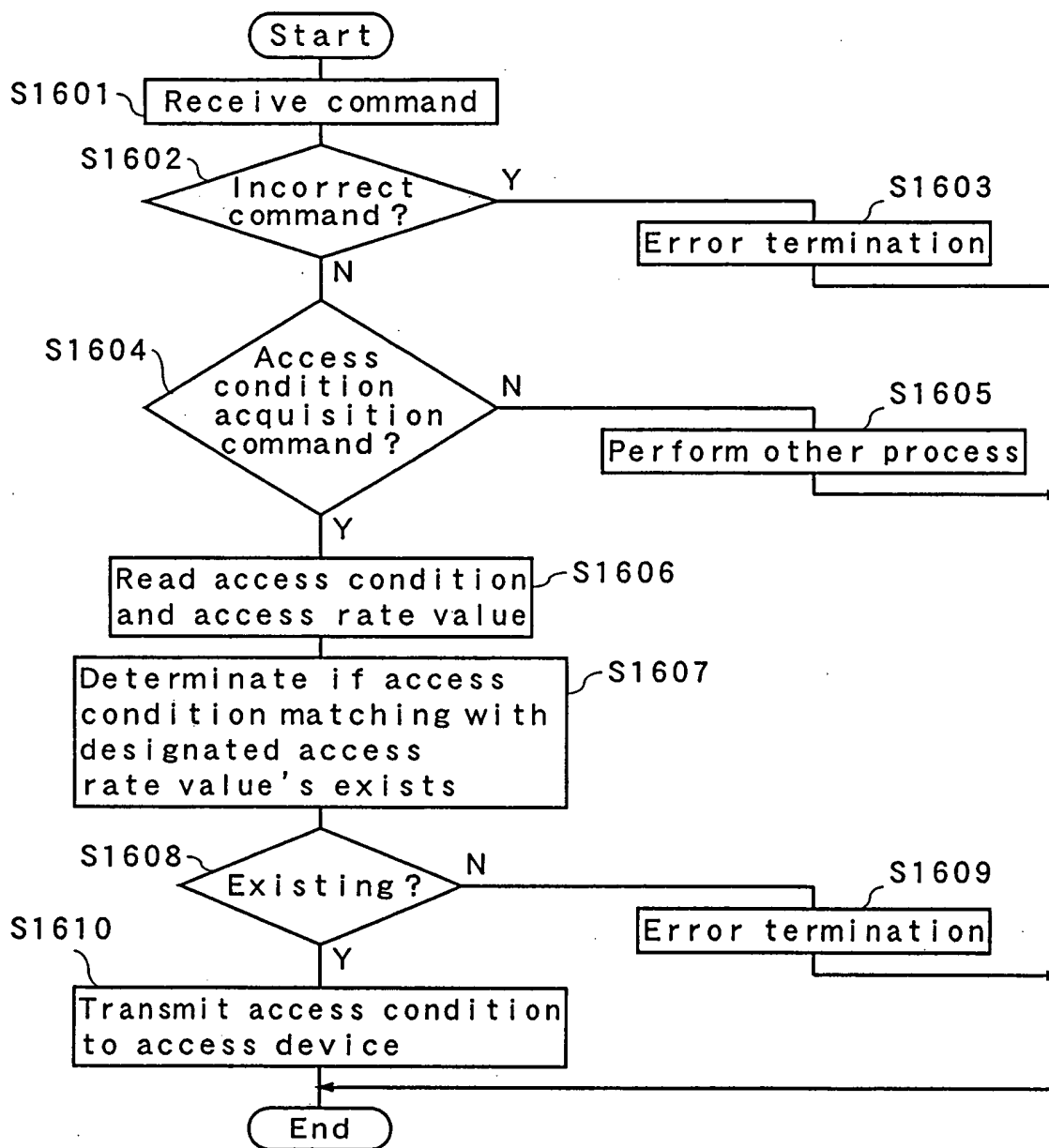


FIG. 19A

| | | Process contents | | |
|------------------------|--------|---|---|---|
| | | Reading | Writing | Erasing |
| Rate performance level | High | Standard trans. rate $\geq 8.0 \text{ MB/s}$ | Standard trans. rate $\geq 8.0 \text{ MB/s}$ | Standard trans. rate $\geq 8.0 \text{ MB/s}$ |
| | Medium | $4.0 \text{ MB/s} \leq$ Standard trans. rate $< 8.0 \text{ MB/s}$ | $4.0 \text{ MB/s} \leq$ Standard trans. rate $< 8.0 \text{ MB/s}$ | $4.0 \text{ MB/s} \leq$ Standard trans. rate $< 8.0 \text{ MB/s}$ |
| | Low | Standard trans. rate $< 4.0 \text{ MB/s}$ | Standard trans. rate $< 4.0 \text{ MB/s}$ | Standard trans. rate $< 4.0 \text{ MB/s}$ |

FIG. 19B

| Transfer rate | Rate performance level |
|--|------------------------|
| Transfer rate of reading(standard) = 11 MB/s | High |
| Transfer rate of writing(standard) = 10 MB/s | High |
| Transfer rate of erasing(standard) = 10.3 MB/s | High |
| Transfer rate of reading(worst) = 6 MB/s | High |
| Transfer rate of writing(worst) = 5 MB/s | High |
| Transfer rate of erasing(worst) = 5.1 MB/s | High |

FIG. 23A

| Process contents | | |
|------------------|-----------|-----------|
| Reading | Writing | Erasing |
| Table 1-A | Table 1-B | Table 1-C |

APBIL

FIG. 23B

| | Standard value | | Worst value | |
|-------------------|----------------|-------------|-------------|------------|
| | SA | RA | SA | RA |
| Process unit size | 512 Bytes | 17 ms | 25 ms | 51 ms |
| | 16 KB | 43 μ s | 690 μ s | 1.6 ms |
| | 128 KB | 9.2 μ s | 22 μ s | 86 μ s |
| | 256 KB | 9.2 μ s | 22 μ s | 86 μ s |
| | 1 MB | 9.2 μ s | 22 μ s | 86 μ s |

FIG. 24A

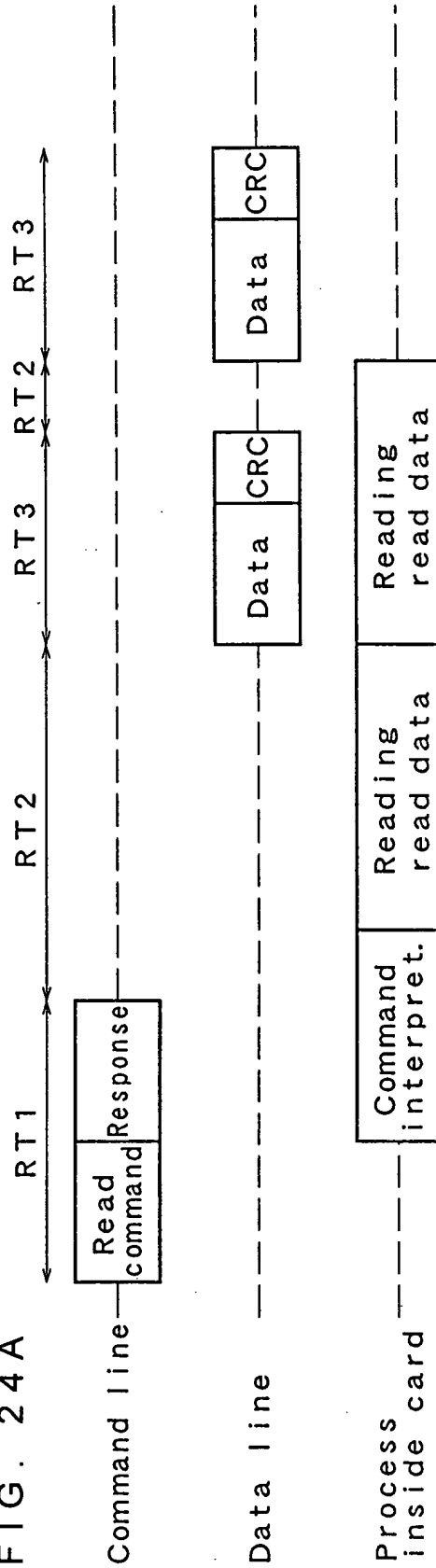


FIG. 24B

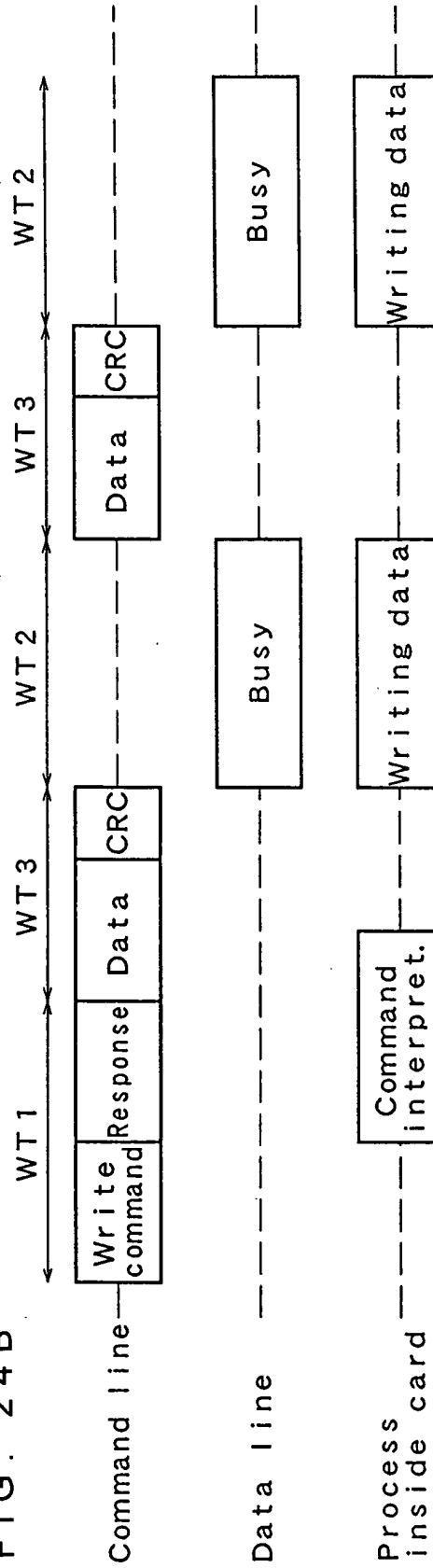


FIG. 26A

| | Process contents | | |
|-------------|------------------|-----------|-----------|
| | Reading | Writing | Erasing |
| | Table 1-A | Table 1-B | Table 1-C |
| | Table 2-A | Table 2-B | Table 2-C |
| Input clock | 12.5 MHz | Table 3-B | Table 3-C |
| | 25 MHz | | |
| | 50 MHz | | |

FIG. 26B

| | Standard value | | | Worst value | |
|--|-------------------|-----------|-----------|-------------|-----------|
| | Process unit size | SA | RA | SA | RA |
| | | | | | |
| | | | | | |
| | 512 Bytes | 0.03 MB/s | 0.02 MB/s | 0.02 MB/s | 0.01 MB/s |
| | 16 KB | 6 MB/s | 0.7 MB/s | 3 MB/s | 0.3 MB/s |
| | 128 KB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |
| | 256 KB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |
| | 1 MB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |

FIG. 27A

| | Process contents | | |
|-------------|-----------------------|-----------|-----------|
| | Reading | Writing | Erasing |
| Input clock | 12.5 MHz Table 1-A | Table 1-B | Table 1-C |
| | 25 MHz Table 2-A | Table 2-B | Table 2-C |
| | 50 MHz Table 3-A | Table 3-B | Table 3-C |

FIG. 27B

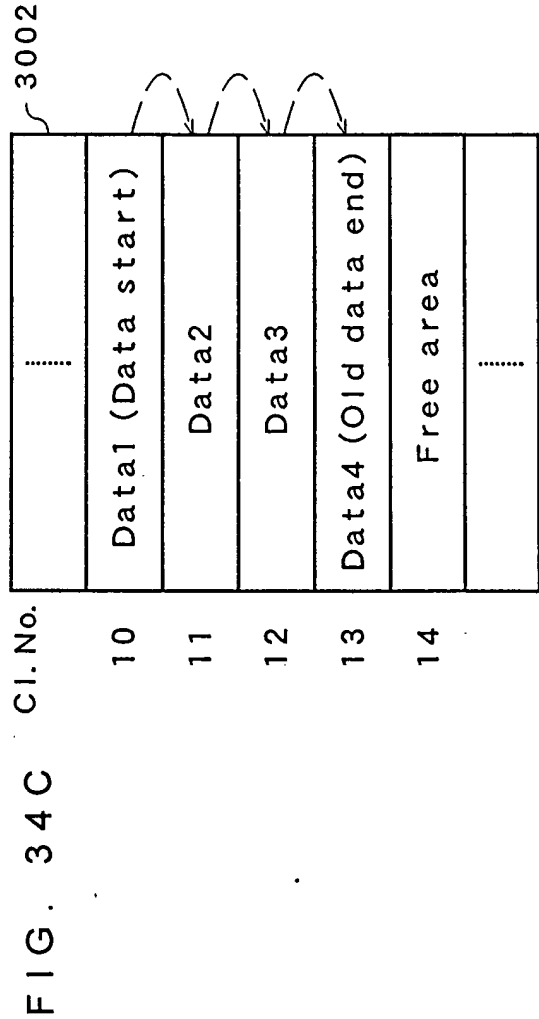
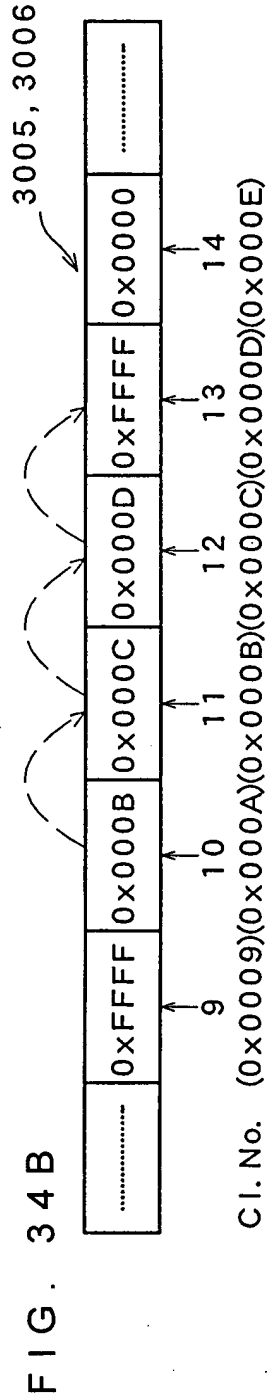
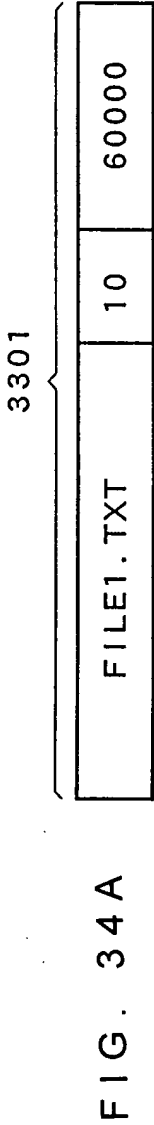
| | Standard value | | Worst value | |
|-------------------|----------------|--------|-------------|--------|
| | SA | RA | SA | RA |
| Process unit size | 512 Bytes | 17 ms | 26 ms | 51 ms |
| | 16 KB | 3 ms | 23 ms | 55 ms |
| | 128 KB | 13 ms | 16 ms | 33 ms |
| | 256 KB | 26 ms | 33 ms | 66 ms |
| | 1 MB | 105 ms | 131 ms | 262 ms |

FIG. 28A

| | Process contents | | |
|-------------|------------------|-----------|-----------|
| | Reading | Writing | Erasing |
| | Table 1-A | Table 1-B | Table 1-C |
| | Table 2-A | Table 2-B | Table 2-C |
| Input clock | Table 3-A | Table 3-B | Table 3-C |
| 12.5 MHz | | | |
| 25 MHz | | | |
| 50 MHz | | | |

FIG. 28B

| | Standard value | | Worst value | |
|-----------|----------------|-----------|-------------|-----------|
| | SA | RA | SA | RA |
| | 0.03 MB/s | 0.02 MB/s | 0.02 MB/s | 0.01 MB/s |
| | 6 MB/s | 0.7 MB/s | 3 MB/s | 0.3 MB/s |
| 512 Bytes | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |
| 16 KB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |
| 128 KB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |
| 256 KB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |
| 1 MB | 10 MB/s | 8 MB/s | 5 MB/s | 4 MB/s |



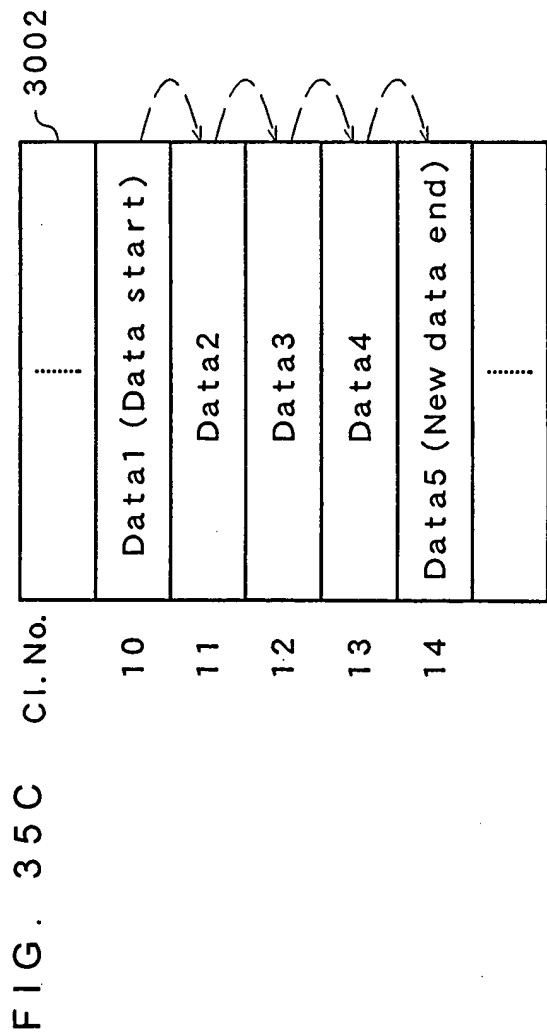
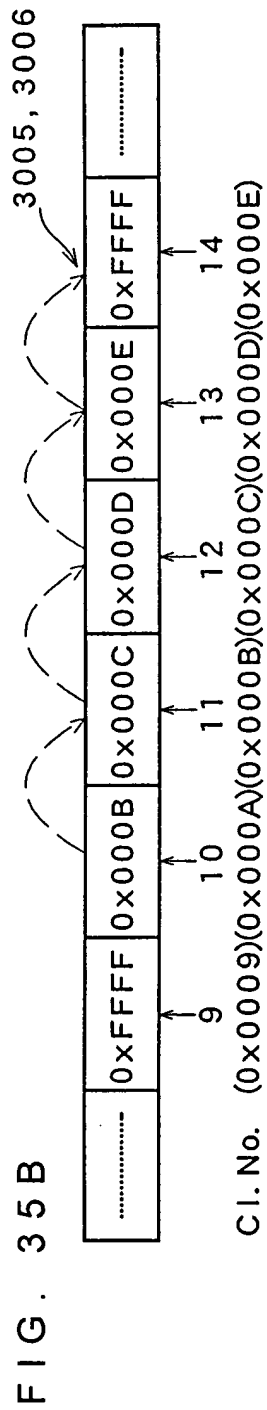
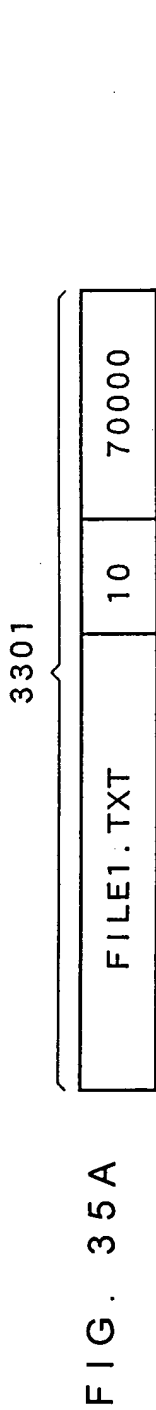


FIG. 37

